

both of which it agrees in having the "bill red, with the culmen black," although in the illustration the bill is incorrectly coloured yellow.

It must not, on account of its name, be confounded with the *Estrelda nitidula*, Hartl. Ibis, 1865, p. 269, which I refer to the genus *Pytilia* (Ibis, 1886, p. 319).

II.—*A List of Birds collected by Mr. Walter Ayres in Transvaal and in Umzeilla's Country lying to the North-east of Transvaal, between the 23rd and 24th degrees of South Latitude and the 32nd and 33rd of East Longitude, with Notes by the Collector.* Communicated by JOHN HENRY GURNEY.

[SUCH of the following species as have been obtained within the Transvaal boundary, and have not been previously recorded from thence by Mr. Thomas Ayres or myself, are here numbered consecutively with those of which I have previously spoken in the pages of 'The Ibis.'—J. H. G.]

SCELOSPIZIAS POLYZONOIDES (Smith). Smith's Many-banded Hawk.

Female, adult, iris brick-red, shot in high trees, 19th June, 1885, at Lehtaba river, lat. $23^{\circ} 10'$ and long. $31^{\circ} 30'$.

ASTURINULA MONOGRAMMICA (Temm.). One-streaked Hawk.

Female, shot at Buffel's (Transvaal), September 1, 1885.

I have met with these birds in the Rustenberg district; they are not so shy as most Hawks, and with a little caution one can generally get within shot of them; they are always found in bushy country.

ACCIPITER MINULLUS (Daud.). Least South-African Sparrow-hawk.

Female, adult, Lehtaba river, August 21, 1885. Length $10\frac{3}{4}$ inches, tail 5, wing $6\frac{1}{2}$. Irides and legs yellow. Stomach contained small birds. Shot from the top branches of a high tree.

385. *LOPHOAETUS OCCIPITALIS* (Daud.). Long-crested African Hawk-eagle.

Male, immature, shot 1st July, 1885, at the junction of the Mashupan and Olifants rivers (Transvaal).

There was a dead stump in an old Kaffir garden close to my skerm on which I several times noticed this bird sitting, no doubt watching for rats; and when I had the time to spare I shot and preserved it. I only saw one other at that place, and had not previously met with them since leaving the coast. These Eagles perch on some low bush or dead stump when watching for their prey, which principally consists of rats, which they swallow whole; they are not shy birds, and when disturbed they fly low and usually settle again close by.

HALIAETUS VOCIFER (Daud.). African Sea-eagle.

Male, adult, shot at Rovi-rand, in Umzeilla's country, July 1885.

I met with a few of these Eagles on the Olifants and Lehtaba rivers; the present specimen I killed with my rifle while it was perched on the branch of a tree overhanging the Spruit at Rovi-rand near the Lehtaba river.

These Eagles are shy birds, and it is very difficult to get within shot-range of them; one evening, however, just at dusk, one allowed me to pass within twenty yards of it as it was sitting on a dead tree, where it had evidently taken up its quarters for the night; for, on returning at early dawn, after watching all night for game, I found it still in the same place, and again it allowed me to pass close to it.

HUHUA LACTEA (Temm.). Verreaux's Owl.

Female, shot 5th August, 1885, near the Siquintzie river (a small river in Umzeilla's country), in lat. $23^{\circ} 30'$ and long. 32° .

Passing under a large tree in the dense bush by which the river Siquintzie is bordered for about a mile on either side, I disturbed this Owl, which flew off and alighted high up in the branches of another very large tree close by, where it had hardly settled when I heard a rush of wings and saw a small

Eagle coming at lightning speed, which dashed viciously at the Owl several times, but did not succeed in knocking it off its perch, and in fact the Owl did not seem much concerned: the Eagle then settled on a tree close by, and from the way in which it stretched its neck and looked about, I thought it seemed surprised and disappointed. It was an active-looking little Eagle, with a long neck, small head, and feathered down to the toes; all its upper parts were dark slate-colour, the lower parts white with a few dark blotches; it was very like *Nisaetus spilogaster* in appearance and build, but smaller*.

After observing the Eagle for a few seconds I turned my attention to the Owl, which I shot with a bullet, having been at the time in search of large game.

I met with a pair of these Owls at Buffels, and fired at one with No. 7 shot at very close range, but failed to bring it down. I had also a close shot at one at Rovi-rand, but it got away; they are certainly very tough. I think they vary a good deal in size. They seem to have a wide range, as I have found them in the Free State, in the Rustenberg district, and along the Limpopo; when once disturbed by day they are very shy and difficult to approach.

[I now agree with Mr. Sharpe that *Huhua verreauxi* of South Africa is not specifically distinct from the more northern *H. lactea*, as I have already explained in the P. Z. S. 1884, p. 560.—J. H. G.]

GLAUCIDIUM PERLATUM (Vicill.). African Pearl-spotted Owlet.

Female, Lehtaba river-drift, August 1885.

This little Owl, when I shot it, had just killed a large striped field-mouse; this was about eight o'clock in the morning, and the sun was well up.

These Owls are often to be seen by day flying from tree to tree, and appear to be very wide awake; they also call a good deal in the daytime. I have found them plentiful along the Limpopo river, and also in the Rustenberg district

* [I think there can be little doubt that this Eagle was a small male of *Nisaetus spilogaster*.—J. H. G.]

wherever there is suitable bush ; they have a dipping flight, opening and shutting their wings pretty quickly, very unlike the steady flight of the larger Owls. Other small birds have a great dislike to them, and never lose a chance of tormenting them and driving them about.

386. *TENIOGLAUX CAPENSIS* (Smith). African Barred Owl.

Female, shot 2nd July, 1885, at the junction of the Mashupan and Olifants rivers (Transvaal).

I shot this Owl in a dense strip of bush that skirts the Mashupan river. I had not before met with it, but later on I saw another on the Sinquitzie river, though, having only a rifle with me, I could not secure it.

[The late Mr. E. Buxton informed me that he found this species common at Dar-es-Salaam, on the coast, about 70 miles S.W. of Zanzibar. *Conf.* Shelley, P. Z. S. 1881, p. 563, and 1882, p. 305.—J. H. G.]

CORACIAS CAUDATA, Vieill. Lilac-breasted Roller.

Male and female, shot at Buffels' Kraal, May 1885.

These are shy birds and, as a rule, difficult to approach, invariably settling on the top of some isolated tree or bush. They are generally to be found singly or in pairs ; but when the grass is burned in suitable localities I have seen as many as a dozen or more together ; they then follow the course of the fire, settling on trees and bushes in front of the flames and pouncing down on beetles or grasshoppers that are driven out by the heat.

CERYLE MAXIMA (Pall.). Great African Kingfisher.

Male, shot at Lehtaba river-drift, August 1885.

These birds, though nowhere plentiful, are to be found on nearly all the rivers in this country, but they are extremely shy and difficult to shoot. One of their nests was discovered by my Boer driver in a perpendicular bank of a little stream running into the Lehtaba at the drift ; it was in a hole about four feet from the top of the bank, and, from below, a man standing in the water up to his middle could just reach it. The place was an awkward one to get at, especially as there

were crocodiles about; however my driver and a Kaffir, by digging with a spade to a considerable depth, managed to get at the nest. The Boer put his arm into the hole and felt the eggs; he also felt the old bird, not sitting on the eggs, but a little on one side, where it remained and allowed itself to be caught: it was my intention to let it go, but my companion wishing for its skin it was retained, and on dissection proved to be a male bird. The eggs were four in number, and white.

387. *BUCEROS BUCCINATOR*, Temm. Trumpeter Hornbill.

Two females, shot July 1885, at the junction of the Mashupan and Olifants rivers (Tausvaal).

I found a few of these strange birds in the bush along the above-mentioned rivers, where they were feeding on wild figs. The last time I had previously met with this species was many years ago on the coast of Natal.

These Hornbills are shy and difficult to approach; their flight is peculiar, and they make a great noise with their wings; their note is loud, harsh, and not easily described, a sort of *kor-kor*, *kor*, *kor*, *kor-kor*, which has a melancholy sound.

[The two females sent measure as follows, the larger bird being apparently the older of the two:—

Wing.	Tail.	Tarsus.
in.	in.	in.
10·55	8·60	1·80
10·40	8·30	1·60

In Sharpe's 'Layard' the wing is given as 11·50 and the tail as 9·50, which may probably be the measurement of a male bird.—J. H. G.]

IRRISOR ERYTHORHYNCHUS (Lath.). Red-billed Woodhoopoe.

Male, shot at Rovi-rand, June 1885.

I found these birds tolerably plentiful all along my route wherever there was suitable bush; they are found in small families, varying from three to eight in number; they search for food principally amongst the dead branches of trees and

dead creepers, and are fond of hunting over old dead stumps, around which they move almost as nimbly as a Woodpecker.

388. RHINOPOMASTES CYANOMELAS (Vieill.). Scimitar-billed Wood-hoopoe.

Female, shot at Rovi-rand, June 10, 1885.

These birds occur singly or in pairs; though I have not found them plentiful in any one locality, they have a wide range, and I have met with them more or less wherever I have travelled in the Transvaal.

[The specimen sent was obtained just beyond the Transvaal border; but, on the strength of Mr. Walter Ayres's note, I have included the species in the Transvaal enumeration. I may add that in the present specimen there is no white on the inner primary-coverts, and that in 'The Ibis' for 1868, p. 44, I recorded a male in which the white spot on these coverts existed on one wing only.—J. H. G.]

CENTROPUS NATALENSIS, Shelley. Natal Spur-heel Cuckoo.

Male, shot May 30, 1885, at Tentic river, on the Transvaal boundary.

These birds are found in the thick reeds and underwood growing along the streams; they search for their food on the ground, and depend for their safety more on their legs than on their wings; when once disturbed it is difficult to find them again, as they hide away either on the ground or in the dense underwood.

I shot the specimen sent whilst it was creeping about in the thick leaves of a wild palm-tree which grew on the edge of the river.

[The specimens referred by me to *C. senegalensis* in 'The Ibis,' 1871, p. 261, and 1884, p. 225, were incorrectly named, and are examples of *C. natalensis*, of which I now possess four Transvaal skins. None of these show any trace of a white eyebrow; this latter is evidently by no means a constant character in this species.—J. H. G.]

389. BARBATULA BILINEATA, Sund. Bridled Barbet.

Male and female, shot 27th July, 1885, at Umzingella's, near the Olifants and Mashupan rivers (Transvaal).

Length of male in the flesh 4 inches, wing $2\frac{1}{16}$, tail 1; bill black, legs ash-colour.

I noticed these little Barbets hunting about for insects on a tall species of acacia tree in the thick bush adjacent to the Mashupan river, and was fortunate enough to secure them both. I had never met with these Barbets before, nor did I see any others of them where I killed this pair.

[In the pair sent no difference is perceptible between the sexes. The female bird has been added to the collection at the British Museum.—J. H. G.]

MESOPICUS NAMAQUUS (Licht.). Bearded Woodpecker.

Male, shot 5th May, 1885, at Sibideilla's (Transvaal).

These Woodpeckers are not at all plentiful, but are to be found sparingly in most parts of the country where the bush is favourable: they make a loud tapping noise that can be heard at a considerable distance, and is generally answered at a distance by the bird's mate; it is certainly a call-tap, heard at regular intervals, having always the same sound and invariably the same number (four) of taps.

CAMPOTHERA ABINGTONI (Smith). Golden-tailed Woodpecker.

Male, shot June 13, 1885, at Rovi-rand, Umzeilla's country.

I found these birds fairly plentiful, especially in the Mopani forest, near Lehtaba river-drift.

CAMPOTHERA BENNETTI (Smith). Bennett's Woodpecker.

Male, Lehtaba river.

Female, Buffels (Transvaal).

The same remarks apply to this species as to the preceding one. I have found both in the Rustenberg district amongst the Boukenhout trees, which are not unlike the Mopani.

390. *PSITTACUS FUSCICAPILLUS*, Verr. & Des Murs. Goe Parrot.

Two males, shot 24th July, 1885, at Umzingella's, near Olifants river (Transvaal).

I first found these Parrots a little below Buffels, and from thence, more or less, till I got to Umzingella's, where they

are plentiful, and the Kaffirs told me that in the summer months they come in great numbers and do much damage to their crops of Indian corn and millet. I generally met with them in pairs, but sometimes saw as many as seven or eight together. They are fond of sitting in the top branches of some dead tree, and are very difficult to see, as, when approached, they hide most cleverly behind the branches; I have sometimes stood for nearly half an hour gazing up at a dead tree in vain, though I knew that two or three of these birds were hiding amongst the branches. They continually utter their loud and harsh cry, but see them you cannot, even in trees where one would think a mouse would hardly evade detection. In winter their food consists of the fruit of the wild fig-trees, of which there are an abundance, in full bearing, along the Olifants and Mashupan rivers.

391. *COSSYPHA NATALENSIS*, Smith. Natal Chat-thrush.

Female, shot 24th July, 1885, at Umzingeilla's near Olifants river (Transvaal).

I met with a few of these birds in the above locality and also at Rovi-rand; they are found in the dense underwood along the river-banks searching for their food on the ground, and are difficult to shoot on account of the impenetrable nature of the bush which they frequent.

392. *COSSYPHA QUADRIVIRGATA*, Reich. Four-streaked Chat-thrush.

Male, near Olifants river, Transvaal.

This bird I shot on 29th July, 1885, in the thick Mopani forest some few miles from Umzingeilla's. I do not remember having met with this species previously, and I know nothing of its habits.

[The specimen sent is the most southern example of this species which has come under my notice; it has been added to the collection of the British Museum.—J. H. G.]

393. *SAXICOLA SHELLEYI*, Sharpe. Shelley's Wheatear.

Two males, shot at Lehtaba river-drift, August 1885.

Female, shot at Umzingeilla's, Olifants river (Transvaal), 29th July, 1885.

I do not remember to have met with these birds before. They seek their food on the ground, constantly flying up and settling on the lower branches of some convenient tree, and then returning to the ground; they are constantly on the move, and are rather shy, flying, when disturbed, from tree to tree, and not admitting of a near approach.

[The above specimens agree in coloration and markings with the description given by Mr. Sharpe at p. 246 of his edition of 'Layard,' and at p. 52 of vol. vii. of the British Museum 'Catalogue,' except that in the present female the entire chin, throat (from one ear-covert to the other), and jugulum are transversely, but somewhat irregularly, barred with blackish brown. Both the above males measure 4.20 inches in the wing, and the female 3.70; the tarsus measures 1.10 in all three specimens. This species is, I think, obviously a very near ally of *S. monticola*, and I can hardly think that these two Chats ought to be generically separated merely on account of a very slight difference in the proportions of their primaries; but the present bird has been referred to the genus *Thamnolea*, whilst the Mountain Wheatear has been retained in that of *Saxicola*. Vide Sharpe's 'Layard,' p. 819.—J. H. G.]

394. CINNYRIS GUTTURALIS (Linn.). Natal Sun-bird.

Male, shot at Umzingella's, near the Olifants and Mashupan rivers (Transvaal), 1st July, 1885.

Whilst trying for a shot at Sea-cows one morning, along the Mashupan, I noticed several of these handsome little birds busily extracting honey from the flowers of a shrub in blossom; there was only a patch of it a few yards in circumference, but this was alive with Sun-birds, and, besides the present species, I noticed *C. mariquensis* and *C. talatala*. The next day I went with my shot-gun and obtained the specimen now sent; I subsequently saw two others near Buffels, but was not able to secure them. This is the first time I have met with the Natal Sun-bird since leaving the coast of Natal in 1870.

CINNYRIS TALATALA (Smith). South - African White-breasted Sun-bird.

Male, immature.

I shot this specimen at Rovi-rand on 19th June, 1885 ; it was hopping about very quickly, sipping honey from the flowers of a creeper which grew in the thick underwood along the banks of the spruit, and was quick and restless in its movements ; on dissection it proved to be a male. I found no other Sun-bird about this spot.

[The present specimen has been kindly identified for me by Captain Shelley as a young male of *C. talatala*.—J. H. G.]

395. ANTHODIÆTA COLLARIS (Vieill.). Natal Collared Sun-bird.

Female, Umzingeilla's, near Mashupan river (Transvaal), 1st July, 1885.

I met with a few of these tiny Sun-birds in the dense bush along the Mashupan, where they find flowering creepers to their taste.

GRAUCALUS PECTORALIS, Jard. & Selby. Pectoral Cuckoo-shrike.

Female, Rovi-rand near Lehtaba river, 13th June, 1885.

Length $9\frac{3}{4}$ inches, wing $5\frac{3}{4}$, tail $4\frac{3}{4}$. Bill and legs black ; eyes dark brown, and very large for the size of the bird. When I shot this specimen it was catching insects in the top branches of a high mimosa tree ; from its flight I mistook it for a Cuckoo, and only discovered my mistake when I picked it up ; its stomach contained green caterpillars and the shell of a green locust. I unfortunately lost the label on which I had noted the sex of this specimen, but believe it to have been a female.

Male, shot 20th June, 1885, at the same spot as the female. I have not met with this species in Transvaal, neither do I remember seeing it in Natal.

[The two specimens sent appear to be correctly sexed. I do not include them amongst the Transvaal species, as they were killed in a locality beyond the Transvaal border.—J. H. G.]

396. *SIGMODUS RETZII* (Wahlb.). Retzius's Helmet-shrike.

Male, nearly adult, shot 23rd July, 1885, at Umzingella's near Olifants river (Transvaal).

Female, fully adult, same date and place. Eyes yellow; bill red, but yellow at the tip; legs red; eyelids red and deeply notched.

Whilst hunting in some rather open low bush I came across a family of about ten of these strange birds, of which I only managed to secure two; in flight and habits they exactly resembled *Prionops talacoma*, frequenting bushes and hunting on the ground or on the lower branches of stumps and trees for insects. Their flight is heavy, and they fly low, and never go far at a time; but when disturbed they go from bush to bush, and commence feeding again directly they settle.

[In Mr. Sharpe's edition of Mr. Layard's 'Birds of South Africa,' a clerical error has occurred in the treating of the genus *Sigmodus*, which it may be useful here to point out; at p. 407 a description of *S. rufiventris* has by some accident been substituted for that of *S. tricolor*. Both of these species have, however, been correctly described by Mr. Sharpe in his 'Catalogue of the Birds in the British Museum,' vol. iii. pp. 323 and 325.—J. H. G.]

397. *LANIARIUS SULPHUREIPECTUS*, Less. Yellow-fronted Bush-shrike.

Male, shot 9th June, 1885, at Lehtaba river.

Female, shot 24th July, 1885, at Olifants river (Transvaal).

I met with these birds in the thick bush on the banks of the rivers, where they find their food amongst the thick creepers, &c.; they are also to be found searching for insects in the mimosa trees. I met with this species several times in favourable localities, and I also noticed it in 1884 some two hundred miles down the Limpopo, in the thick bush that grows along the banks of that river.

LANIARIUS POLIOCEPHALUS, Licht. (*L. icterus* of the first edition of Layard's 'Birds of South Africa'). Large Grey-headed Bush-shrike.

Male and female, shot at Lehtaba river-drift, 20th August, 1885.

I found a pair of these birds in the bush which skirts the Lehtaba river, and was fortunate enough to get both of them; a few days previously a bird of this species had been observed several times by a Kaffir picking at some strips of meat cut from a giraffe and hung on the branches of a tree to dry. I had not met with this Shrike since leaving Natal, and there they are scarce; they are fond of searching for their food amongst thick creepers.

[These specimens appear to have been killed beyond the Transvaal boundary, and I have therefore not included them in the Transvaal list.—J. H. G.]

TELEPHONUS SENEGALUS (Linn.). Senegal Tchagra-shrike. Female, shot at Rovi-rand, 14th June, 1885.

I frequently met with this bird. It is generally found near water, hunting on the ground for its food; when disturbed it flies up into a bush or tree; its flight is heavy, and it never goes far without settling.

[In 'The Ibis' for 1879, p. 399, the specific name of *erythropterus* was by an error of mine applied to the present species.—J. H. G.]

398. BUPHAGA ERYTHORHYNCHA, Stanl. Red-billed Oxpecker.

Male, shot 1st May, 1885, at Olifants river (Transvaal).

I met with but very few of these birds, which seem to be disappearing as the large game becomes scarcer. The specimen sent was settled with two others on our cattle, making their breakfast of ticks; when disturbed they flew on to the top branches of a high tree close by, whence I shot one of them.

HYPHANTURGUS OCULARIUS (Smith). Smith's Weaver-bird.

Two males, shot at Rovi-rand, 10th and 14th June, 1885.

Both these specimens were shot at the edge of the spruit in Rovi-rand, a small stream close to the Lehtaba river; one

was searching for food amongst the leaves of a wild date-tree growing in the thick underwood, and the other was hopping about in some high grass and reeds, from whence it flew, when disturbed, into a tree, where I shot it.

[The specimen shot on 14th June is in the full breeding-plumage of the male bird; the other shot on 10th June, which is also marked as a male by Mr. Ayres, agrees with the description of the female given in Sharpe's 'Layard,' p. 436, and seems therefore not to have yet acquired its nuptial dress. Mr. Ayres describes the latter specimen as having the "Eyes light brown, the legs ash-coloured, and the bill light brown, with the base of the lower mandible flesh-coloured.—J. H. G.]

399. *MALIMBUS RUBRICEPS* (Sund.). Red-headed Weaver-bird.

Two females, shot at Rovi-rand, 17th June, 1885. Length $5\frac{1}{2}$ inches, wing $3\frac{1}{8}$, tail 2. Eye reddish brown; bill orange; legs flesh-coloured.

I found a small flock of six or eight of these birds, some of which were feeding on the ground, and others perched on low thorn-bushes; I killed two at a shot, both females, but they all appeared to be in the same dull plumage. I do not remember to have previously met with this species.

[The present specimens appear to have been killed beyond the Transvaal boundary; but I enumerate the species as belonging to Transvaal, it having been there obtained by Dr. F. H. Guillemard. The females sent by Mr. Ayres agree with the description given by Dr. Guillemard in 'The Field' newspaper of 13th November, 1880, p. 714, and quoted in Sharpe's edition of Layard's 'Birds of South Africa,' p. 445. I think it probable that the small flock from which these females were obtained may have also comprised male birds which had not attained their nuptial dress.

The Weaver-bird described by Du Bocage ('Birds of Angola,' p. 334) under the title of *Sycobius rubriceps*, and identified by him with the present species, is stated in his description to have "la région auriculaire noirâtre," which

is not the case either in the male of the present species preserved in the British Museum, or in the females sent by Mr. Ayres, one of which has also been placed in the Museum. A very distinct species likewise received the name of *Sycobius rubriceps* from Reichenow, in the 'Journal für Ornithologie' for 1876, p. 209; but, according to the law of priority, the name cannot be retained for the species there described by Reichenow, which, moreover, seems to me, by his description, to be identical with *Malimbus cassini* of Elliot, first described in 'The Ibis,' 1859, p. 392, and subsequently figured in 'The Ibis,' 1876, pl. xiii., where a figure of the male, in full plumage, of the true *Malimbus rubriceps*, taken from the male which is now in the British Museum, is also given.—J. H. G.]

SPERMESTES CUCULLATUS, Swains. Hooded Dwarf Finch.

Two males and two females, shot at Rovi-rand, 16th June, 1885. Eye brown; legs black; upper mandible black, lower ash-colour.

I found these little birds fairly plentiful in flocks, varying from four or five to as many as fifteen in number; they feed on small seeds, and are generally found in low open bush near water. They feed a good deal on the ground, though I have at times seen them on the top branches of high trees. They are shy little birds, and when disturbed often fly quite out of sight.

[The specimens sent appear to have been obtained beyond the Transvaal boundary.—J. H. G.]

LAGONOSTICTA SENEGALA (Linn.). Little Ruddy Waxbill.

I found five of these little birds together at Rhinosterpoort, and killed them all at one shot; they are generally found in thick grass or scrub, and are fond of pecking about on little patches of bare ground. The eye in this species is red, and the eyelid yellow. The specimens sent were shot on 13th May, 1885, and I noticed several others subsequently.

400. CHALCOPELIA AFRA (Linn.). Emerald-spotted Wood-dove.

Female, shot at Rovi-rand, 17th June, 1885.

These pretty little Doves are generally scarce, and only to be found singly or in pairs ; but about the Mashupan river I found them rather plentiful, and on one occasion saw as many as seven together ; they are usually found near the edge of the bush skirting the rivers. They search for their food on the ground, settling, if disturbed, on some low tree or bush. They are most difficult birds to see ; I have met with them in the Rustenberg district.

[Although the specimen sent was obtained beyond the Transvaal boundary, I include the species in the Transvaal lists, as having been observed by Mr. W. Ayres in the Rustenberg district.—J. H. G.]

FRANCOLINUS PILEATUS, Smith. Pileated Francolin.

Male, shot May 1855, at Lehtaba river-drift.

These Francolins inhabit the thick bush on the river-banks, but are not very plentiful ; when frightened they stick their tails straight up and erect their head-feathers, which gives them a crested appearance.

FRANCOLINUS SUBTORQUATUS, Smith. Cogni Francolin.

Female, shot May 1885, at Lehtaba river-drift.

These birds are fairly plentiful, frequenting the open bush-country, where they are found in coveys, varying from five or six in number to a dozen ; they lie very close, and, except with a good dog, are difficult to flush.

401. OTIS CÆRULESCENS, Vieill. Blue-breasted Bustard.

Male, shot 6th April, 1885, between Potchefstroom and Middelburg (Transvaal).

I met with eight or ten of these birds near Klip river-drift, but only succeeded in bagging two of them. This is the only spot in the Transvaal, I believe, where these Bustards are to be found ; but I killed some, many years ago, at Rhinoster river, in the Free State. They are found in pairs or in small companies of five or six, and, as a rule, are not so shy as the other Bustards ; if you walk round them, gradually decreasing the distance, they will squat and allow you to get within shot. They are found in quite open veldts,

and in the Free State I generally met with them near homesteads. They have a loud croaking note.

402. *PARRA AFRICANA*, Gmel. Greater African Jacana.

Female, shot 30th July, 1885, at Mashupan river-drift (Transvaal). Wing 7·05 inches, tarsus 2·80, middle toe *s. u.* 2·90.

I found these birds on most of the rivers and swamps where there were suitable weeds and stagnant water; they may be seen sometimes running along the edge of the water picking up insects, and at other times walking on the leaves of the water-lilies or on the thick weeds that float on the surface of the still pools.

Whilst watching one day for Sea-cows on the river Mashupan, I had a good opportunity of observing one of these birds for at least a quarter of an hour; it was running about on a bed of weeds that floated on the surface of the pool just below me, and kept incessantly turning with its beak lily-leaves and branches of weed, and then pecking at, no doubt, small water-insects or shells which adhered to the lower surface of the leaves. Some of the bundles of weed were heavy, and turning them over seemed quite hard work for the bird; but it was very persevering, and not satisfied till it had turned the weeds completely over.

LIMNOCORAX NIGER (Licht.). Black Crake.

Female, shot June 1885 at Rovi-rand.

I found a good many of these birds in the spruit at Rovi-rand, and also in other small streams, where there were pools of still water with weeds suitable to their habits; they are shy birds, and get away very quickly in the reeds on the approach of danger; when moving about on the feed, they continually utter their note, *chuck-chuck-chuck*.

ARDEA MELANOCEPHALA, Vig. & Childr. Black-necked Heron.

Male and female, shot 6th May, 1885, at Unigoopie river, Leibideila's.

I found about ten of these Herons sitting on the top

branches of a clump of high trees, where they had nests ; I could not climb to the nests, which were high up in the top branches, but think they must have contained eggs or young, as the birds would not be driven away from them. I fired four shots at them, killing as many birds, but the others flew, circling round, and settled again immediately.

These Herons are fond of searching for food in the Kaffir gardens ; the stomach of one that I shot contained a mouse.

BUTORIDES ATRICAPILLA, Afzel. African Black-headed Heron.

Male, shot at Rovi-rand, 19th June, 1885. Female shot at the same place, 17th June, 1885. Iris yellow ; upper mandible black ; lower mandible yellow, with a black stripe along the upper edge.

I found these little Herons on several of the small streams where the banks were well wooded ; those I saw were perched on trees or bushes on the edge of or overhanging the water. When disturbed they utter a harsh cry, not unlike that of the Great Kingfisher (*Ceryle maxima*).

403. LEPTOPTILUS CRUMENIFER (Cab.). African Marabou.

Two specimens, both in process of change from immature to adult dress, shot at Rovi-rand, 11th June, 1886, one of which was found to be a male, and the other was believed to be a female ; but injury from the course of the bullet prevented this from being ascertained with certainty.

Male—length 4 feet 10 inches, wing 2 feet 7 inches, tail 1 foot 2 inches, expanse of wings from tip to tip 9 feet 8 inches. Iris brown ; bill dirty green ; legs black, but covered with fine ashy powder ; a patch of yellow skin at the back of the neck, where it joins the body.

Presumed female—length 4 feet 3 inches ; wing 2 feet 3 inches ; tail 1 foot 1 inch.

I have found these birds very scarce ; but in 1884 I met with one down the Limpopo, near the Mallabas ; and just after the Boër war a few visited Pretoria, and fed on the dead mules and cattle which were lying about the camp.

The two specimens sent came about our camp, and I killed

them with the rifle: the stomach of one contained bits of dry game, skin, and bones, picked up at a deserted Boer camp close by; that of the other was crammed full of what appeared to be horse-dung.

These birds generally come with the Vultures, and with them may be seen circling round at great altitudes; like the Vultures, they often settle about on the trees before alighting on the ground to commence a meal.

[Although the specimens sent were killed beyond the Transvaal boundary, yet, as Mr. Walter Ayres has met with other specimens within that limit, I include the species in the Transvaal list.—J. H. G.]

404. *DENDROCYGNA VIDUATA* (Linn.). White-masked Duck. Female, shot 13th November, 1885.

This, with us very scarce Duck, was shot by my friend Mr. J. Taylor, of Potchefstroom; he saw fifteen of these Ducks sitting in a shallow drift of the Movi river, just above Potchefstroom, and succeeded in bagging seven with a right and left shot, one of which he kindly gave to me. These birds must have wandered from some distant haunts, as this is certainly not their habitat, though I remember having seen one many years ago in a vley about six miles from Potchefstroom.

III.—On *Empidonax brunneus* and its allied Species.

By P. L. SCLATER.

AT Mr. Ridgway's kind request the authorities of the Smithsonian Institution have most obligingly sent over to me for examination the typical specimens of *Empidonax brunneus*, together with examples of *Empidochanes fringillaris*, and of the (so-called) *E. oliva*, concerning which Mr. Ridgway has written in the last number of this Journal ('Ibis,' 1886, p. 460). In his *Empidonax brunneus* I at once recognized the bird which I have heretofore usually called *Empidochanes fuscatus*. But Mr. Ridgway has been able to examine the original types of *Muscipeta fuscata* of Pr. Max., and has shown